

IN THE CLAIMS

Please amend the claims as set forth herein.

Claims, 1-7 (Canceled).

8. (Currently Amended) A method of producing a semiconductor wafer, comprising the steps of:

producing a single crystalline semiconductor ingot with a large vacancy-rich region by removing an OiSF ring by means of moving the OiSF ring from a center of a single crystalline semiconductor growth axis to a circumference and by extending a first area and a second area constituting part of said large vacancy-rich region in which it is easy to produce bulk micro-defects of high density and in which $\Delta(O_i)$, as an oxygen concentration difference between initial oxygen concentration and oxygen concentration after heat treatment in N₂ ambience at 1000 °C for 64 hours, is increased more than other areas, said first and second areas covering all of the wafer except the circumference;

providing a wafer by slicing the single crystalline semiconductor ingot;

carrying out a heat treatment on the wafer at a temperature equal to or higher than 1200 °C under a non-oxidative atmosphere containing hydrogen; and

carrying out a rapid thermal annealing on the wafer at a temperature equal to or lower than 800°C for a period having a duration of two minutes or less.

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Claims 9-16 (Canceled).

17. (Currently Amended) A method of growing an ingot, comprising the steps of:

accelerating a speed of growing from a melt-down silicon to a single crystalline silicon ingot;

maintaining a temperature gradient distribution uniformly from a central part to a circumferential part of the ingot at a growing interface between the melt-down silicon and the ingot grown by crystallization;

forming an OiSF ring at the circumferential part by moving the OiSF ring from a center of a single crystalline semiconductor growth axis to a circumference in order to extend a large vacancy-rich region ~~an area~~ in which it is easy to produce bulk micro-defects of high density and in which delta (Oi) is increased as compared to that of other areas, wherein the delta (Oi) is a difference between an initial oxygen concentration and oxygen concentration after heat treatment with a thermal history which is carried out at 1000°C for 64 hours in a N₂ ambience, said large vacancy-rich region formed to occupy 20 to 90% of a diameter of the ingot.

Claims 18-25 (Canceled).